Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims.

Claim 1 (currently amended). An image sensing apparatus having an image sensing device, comprising:

a driving unit adapted to drive that drives the image sensing device by a plurality of driving schemes;

a pixel defect information storage unit adapted to store that stores pixel defect information as information about a pixel defect in the image sensing device in correspondence with each driving scheme; and

a correction unit adapted to correct that corrects the pixel defect by referring to the pixel defect information in said pixel defect information storage unit in accordance with the driving scheme with which said driving unit drives the image sensing device,

wherein said correction unit, based on first pixel defect information of a first driving scheme from the plurality of driving schemes, generates second pixel defect information for the second driving scheme, and stores the second pixel defect information in said pixel defect information storage unit,

wherein said correction unit corrects the pixel defect by interpolating the defective pixel by using the pixel data of upper, lower, left and right pixels having the same color filter,

wherein each pixel defect within the <u>first second pixel</u> defect information corresponds to a pixel defect within the <u>second first pixel</u> defect information, and

wherein said second driving scheme from the plurality of driving schemes drives to read a second number of pixels of signal from the image sensing device, where the second number is smaller than a first number of pixel of signal read from the image sensing device by the first driving scheme.

Claim 2 (cancelled).

Claim 3 (previously presented). The apparatus according to claim 1, wherein the first driving scheme from the plurality of driving schemes reads all pixels of the image sensing device.

Claim 4 (cancelled).

Claim 5 (original). The apparatus according to claim 1, wherein said pixel defect information storage means is a nonvolatile recording medium.

Claim 6 (currently amended). An image sensing method using an image sensing apparatus having an image sensing device and driving unit adapted to drive that drives the image sensing device by a plurality of driving schemes, comprising:

generating pixel defect information in accordance with the driving scheme with which the driving unit drives the image sensing device, such that each pixel defect within the pixel defect information of a driving scheme corresponds to a pixel defect within each pixel defect information of the remainder of the plurality of driving schemes,

correcting a pixel defect by referring to pixel defect information in pixel defect information storage unit in accordance with the driving scheme with which the driving unit drives the image sensing device, and by interpolating the defective pixel by using the pixel data of upper, lower, left and right pixels having the same color filter,

the pixel defect information storage unit storing the pixel defect information as information about the pixel defect in the image sensing device in correspondence with each driving scheme.

Claim 7 (currently amended). A computer-readable recording medium which records a computer program for an image sensing apparatus having an image sensing device and driving unit adapted to drive that drives the image sensing device by a plurality of driving schemes, characterized by

generating pixel defect information in accordance with the driving scheme with which the driving unit drives the image sensing device, such that each pixel defect within the pixel defect information of a driving scheme corresponds to a pixel defect within each pixel defect information of the remainder of the plurality of driving schemes,

causing a computer in the image sensing apparatus to execute processing for correcting a pixel defect by referring to pixel defect information in pixel defect information storage unit in accordance with the driving scheme with which the driving unit drives the image sensing device, and interpolating the defective pixel by using the pixel data of upper, lower, left and right pixels having the same color filter.

the pixel defect information storage unit storing the pixel defect information as information about the pixel defect in the image sensing device in correspondence with each driving scheme.

Claim 8 (currently amended). A computer-readable recording medium encoded with a computer program for an image sensing apparatus having an image sensing device and driving unit adapted to drive that drives the image sensing device by a plurality of driving schemes, characterized by

generating pixel defect information in accordance with the driving scheme with which the driving unit drives the image sensing device, such that each pixel defect within the pixel defect information of a driving scheme corresponds to a pixel defect within each pixel defect information of the remainder of the plurality of driving schemes,

causing a computer in the image sensing apparatus to execute processing for correcting a pixel defect by referring to pixel defect information in pixel defect information storage unit in accordance with the driving scheme with which the driving unit drives the image sensing device, and interpolating the defective pixel by using the pixel data of upper, lower, left and right pixels having the same color filter,

the pixel defect information storage unit storing the pixel defect information as information about the pixel defect in the image sensing device in correspondence with each driving scheme.